

Design Standards for drainage of commercial lot

1. All sites that are adjacent or reasonable close to an existing storm water sewer system shall be required to drain via private underground system to tie to the public storm sewer.
2. Each commercial drive may drain an impervious area of not to exceed 0.75 acre.
3. It is preferred to have the roof drain tie to private storm sewer system or daylight at either the parking lot or landscape area.
4. If condition exists such that connection to storm sewer or paved parking is not feasible, approval may be given by OCI and/or City Engineer to allow roof drain onto grassed area if it has a reasonable distance ($35'\pm$) from the sidewalk or right of-way line. When the roof drain is directed onto the grassed area, reinforced erosion control measures must be provided.
5. Deeter Curb fixtures may be used to drain parking lot and/or roof when storm sewer access is not available with the following design stipulations:
 - A. Slope of pipe $\geq 1\%$.
 - B. If sidewalk sections do not have sufficient grade over the pipe, either relay sidewalk to hump over the pipe with maximum longitudinal slope of 0.5 inch/ft or providing reinforcing to allow the pipe to protrude partly into the sidewalk.
 - C. Prefer 6" pipe, since it will take about three 4" pipe to equal the capacity of one 6" pipe.
 - D. May use a grated junction box inside the private property to split a larger roof drain into smaller pipes before going into public right-of-way. For example: one 6" pipe into junction box, 3-4" pipes out to curb. No more than 3 Deeter connections can be used side by side at one location with minimum distance of 50' between locations..
 - E. Encourage combination of several downspouts into one outlet.

When submitting request for Deeter curb cut permit, the site drawing shall include information such as upstream and downstream flow line elevations, top of curb elevations, existing and proposed sidewalk grades and the limits of sidewalk sections to be removed and replaced, etc.

Since it has come to light that not all locations are suitable for Deeter applications (i.e. limited cover over pipe, sidewalk right behind the curb, diminishing gutter section due to overlay of asphalt, etc.), other alternative methods such as concrete flumes (with covers other than the banned checkered steel plate) should be explored. The City will review any proposal on a case-by-case basis until an alternate is adopted as standard.